

List of Contents

NUMBER 1

E. Thandapani and B. S. Lalli 1 Oscillation Criteria for a Second Order Damped Difference Equation

S. A. Maggelakis and A. E. Savakis 7 Heat Transfer in Tissue Containing a Prevascular Tumor

A. Largillier 11 A Numerical Quadrature for Some Weakly Singular Integral Operators

Y.-K. Liu 15 The Linear q -Difference Equation $y(x)=ay(qx) + f(x)$

S. Cordier 19 Global Solutions to the Isothermal Euler-Poisson Plasma Model

A. G. Ramm 25 The Radon Transform is an Isomorphism between $L^2(B_a)$ and $H_\epsilon(Z_a)$

X. P. Ding and E. Tarafdar 31 Existence and Uniqueness of Solutions for a General Nonlinear Variational Inequality

M. J. Miksis and L. Ting 37 Panel Oscillations and Acoustic Waves

G. Adomian and R. E. Meyers 43 Isentropic Flow of an Inviscid Gas

F. Brezzi, I. Gasser, P. A. Markowich and C. Schmeiser 47 Thermal Equilibrium States of the Quantum Hydrodynamic Model for Semiconductors in One Dimension

M. Ziane 53 Regularity Results for Stokes Type Systems Related to Climatology

M. S. El Naschie 59 Renormalization Approach to the Dimension of Diffusion in Cantorian Space

M. L. Menéndez, D. Morales, L. Pardo and M. Salicrú 65 Statistical Tests Based on Geodesic Distances

A. B. Stephens, Y. Yesha and K. Humenik 71 Optimal Allocation for Partially Replicated Database Systems on Tree-Based Networks

W. C. Rheinboldt and B. Simeon 77 Performance Analysis of Some Methods for Solving Euler-Lagrange Equations

R. Borghi, C.-M. Brauner and C. Schmidt-Lainé 83 Stability in a Model of Turbulent Combustion

W. Weng and M. Rahman 87 A Note on the Matrix Analysis of Dual Reciprocity Boundary Element Method

B. D. Khanh	91 A Numerical Evaluation of Integrals by the Method of Steepest Descents
M. S. Gowda	97 Reducing a Monotone Horizontal LCP to an LCP
 NUMBER 2	
A. Russo	1 <i>A Posteriori</i> Error Estimators for the Stokes Problem
C. L. Carter and H. J. Hamilton	5 A Fast, On-Line Generalization Algorithm for Knowledge Discovery
A. S. Alekseev and V. S. Belonosov	13 The Scattering of Plane Waves in Inhomogeneous Half-Space
A. Debussche and R. Temam	21 Inertial Manifolds with Delay
Y. Qin and J. Chadam	25 A Nonlinear Stability Problem for Ferromagnetic Fluids in a Porous Medium
Q. Tang and S. Wang	31 Long Time Behavior of the Ginzburg-Landau Superconductivity Equations
J. Nieminen	35 The Structure of the Centroid in a Ptolemaic Graph
M. L. Frankel and V. Roytburd	39 Finite-Dimensional Model of Thermal Instability
R. Klein and L. Ting	45 Theoretical and Experimental Studies of Slender Vortex Filaments
G. Adomian	51 Fisher-Kolmogorov Equation
C. Cercignani	53 Weak Solutions of the Boltzmann Equation and Energy Conservation
W. Chen and F. Tu	61 Modal Observability and Detectability for Infinite Dimensional Systems
P. M. Pardalos, G.-L. Xue and L. Yong	67 Efficient Computation of an Isotonic Median Regression
E. C. Cho	71 The Volume of a Tetrahedron
R. Ahlsweide and S. L. Bezrukov	75 Edge Isoperimetric Theorems for Integer Point Arrays
S. S. Cheng and T. T. Lu	81 An Inequality for an Integral Quadratic Form
N. h. Cong	85 A Fast Convergence Parallel DIRKN Method and Its Applications to PDEs
J. F. Scheid	91 A Dissolution-Growth Problem with Surface Tension: Local Existence and Uniqueness
S. Avdonin and S. A. Ivanov	97 Boundary Controllability Problems for the Wave Equation in a Parallelepiped

NUMBER 3

Z.-Y. Liu and M. Renardy 1 A Note on the Equations of a Thermoelastic Plate

W. Craig and B. J. Hunton 7 Modulated Waves on a Vortex Filament beneath a Fluid Surface

G. Zhang and S. S. Cheng 13 Oscillation Criteria for a Neutral Difference Equation with Delay

M. Fuhrman 19 A Note on the Nonsymmetric Ornstein-Uhlenbeck Process in Hilbert Spaces

P. Roe 23 Local Reduction of Certain Wave Operators to One-Dimensional Form

L. Yeh 29 A Note on Wielandt's Inequality

J. F. Rosenblueth 33 Infinite Time Problems with Shifted and Delayed Controls

Y.-F. Deng, R. A. McCoy, R. B. Marr, R. F. Peierls and O. Yasar 37 Molecular Dynamics on Distributed-Memory MIMD Computers with Load Balancing

H. Q. Yang and Z. Yang 43 Calculating Inverse Functions of Fuzzy Numbers

R. Bru, C. Corral and J. Mas 49 A Preconditioned Conjugate Gradient Method on a Distributed Memory Multiprocessor

J. D. Logan and V. Zlotnik 55 The Convection-Diffusion Equation with Periodic Boundary Conditions

A. McNabb, L. Bass and M. Suzuki 63 Using Flux Ratio Theorems for Albumin Enhanced Fatty Acid Fluxes across a Lipid Water Interface

Z. I. Balanov and Y. I. Schwartzman 69 Buckling of a Thin Elastic Plate

J. H. Zhang 75 General Strongly Nonlinear Variational Inequalities for Multifunctions

R. B. Hoyle 81 Nonlinear Phase Diffusion Equations for the Long-Wave Instabilities of Hexagons

V. Zvaritch, M. Myslovitch and B. Martchenko 87 The Models of Random Periodic Information Signals on the White Noise Bases

A. J. George and A. Chakrabarti 91 The Adomian Method Applied to Some Extraordinary Differential Equations

NUMBER 4

N. M. Arató 1 Limit Boundary Value Problems in Regions with Random Fine Grained Boundaries

O. Manley, M. Marion and R. Temam 7 Fully Nonlinear Multispecies Reaction-Diffusion Equations

M. L. Brodzik	13 An Algorithm for the Numerical Detection of Simplex Overlap
A. W. M. Dress and W. Terhalle	19 Well-Layered Maps and the Maximum-Degree $k \times k$ -Subdeterminant of a Matrix of Rational Functions
I. Bonzani and M. T. Vacca	25 The Solution to the Cauchy Problem for a Class of Nonlinear Integrodifferential Equations
Z. Réti	29 Deblurring Images Blurred by the Discrete Gaussian
K. Murota	37 Finding Optimal Minors of Valuated Bimatroids
P. T. D. Dang	43 A Note on Finite-Element Spectral Computations for Integro-Differential Operators
G.-J. Liao and J.-Z. Su	47 A Moving Grid Method for (1+1) Dimension
R. C. Powers	51 Intersection Rules for Consensus n -Trees
T. P. Witelski	57 Merging Traveling Waves for the Porous-Fisher's Equation
T. Tachim Medjo	63 Vorticity-Velocity Formulation for the Stationary Navier-Stokes Equations: The Three-Dimensional Case
T. A. Gulliver and V. K. Bhargava	67 A (105,10,47) Binary Quasi-Cyclic Code
L. Chen, Z. Lu and W. Wang	71 The Effect of Delays on the Permanence for Lotka-Volterra Systems
F. S. Weinstein	75 An Interesting Feature of the Radon Transform
K. Sun, R. P. Tewarson, A. M. Weinstein and J. L. Stephenson	79 Numerical Solution of Differential and Algebraic Equations for a Flow Model with Diffusion
J. C. Panetta	83 A Logistic Model of Periodic Chemotherapy
A. G. Ramm	87 Examples of Nonuniqueness for an Inverse Problem of Geophysics
F.-H. Wong, C.-C. Yeh and S.-L. Yu	91 A Maximum Principle for Second Order Nonlinear Differential Inequalities and Its Applications
W. Layton and P. Rabier	97 The Element Separation Property and Parallel Finite Element Methods for the Navier-Stokes Equation

NUMBER 5

S. Bertoluzza	1 <i>A Posteriori</i> Error Estimates for the Wavelet Galerkin Method
F. Quorl	7 A New Computation Technique of Glauert's Integrals
A. Fall	11 Sparse Logical Terms

P. B. Dubovskii and I. W. Stewart	17 The Order of Singularity of Solutions for the Stationary Coagulation Equation
D. Chae and P. Dubovskii	21 A Connection between Scalar Conservation Laws and Infinite Linear Systems of PDE's
T. P. Witelski	27 Shocks in Nonlinear Diffusion
A. K. Panorska, S. Mitnik and S. T. Rachev	33 Stable GARCH Models for Financial Time Series
R. F. Tichy and J. Uitz	39 An Extension of Minkowski's Singular Function
N. Bellomo, M. Esteban and M. Lachowicz	47 Nonlinear Kinetic Equations with Dissipative Collisions
B. Grébert and J. C. Guillot	53 Periodic Solutions of Coupled Nonlinear Schrödinger Equations in Nonlinear Optics: The Nonresonant Case
A. A. Dobrynin, I. Gutman and G. Dömöör	57 A Wiener-Type Graph Invariant for Some Bipartite Graphs
H.-J. Li and C.-C. Yeh	63 Nonoscillation Criteria for Second-Order Half-Linear Differential Equations
H. M. Byrne and M. A. J. Chaplain	71 Explicit Solutions of a Simplified Model of Capillary Sprout Growth During Tumour Angiogenesis
A. W. M. Dress and W. Terhalle	77 Well-Layered Maps—A Class of Greedily Optimizable Set Functions
T. A. Gulliver and V. K. Bhargava	81 An Updated Table of Rate $1/p$ Binary Quasi-Cyclic Codes
V. Y. Pan	87 Weyl's Quadtree Algorithm for the Unsymmetric Eigenvalue Problem
M. Gharib and M. Abdel-Fattah	89 A Uniform Estimate for the Rate of Convergence in the Central Limit Theorem for Homogeneous Markov Chains
C. Cercignani	95 Errata: Weak Solutions of the Boltzmann Equation and Energy Conservation

NUMBER 6

J. Yan and B. Liu	1 Asymptotic Behavior of a Nonlinear Delay Difference Equation
G. Adomian and R. E. Meyers	7 Generalized Nonlinear Schrödinger Equation with Time-Dependent Dissipation
Yu. M. Laevsky and O. V. Rudenko	9 Splitting Methods for Parabolic Problems in Nonrectangular Domains
S. Lynch	15 Limit Cycles of Generalized Liénard Equations

I. Győri, F. Hartung and J. Turi	19 Numerical Approximations for a Class of Differential Equations with Time- and State-Dependent Delays
M. Marano and J. N. Ureña	25 The Linear Discrete Polya Algorithm
S.-S. Chang, B. S. Lee and Y.-Q. Chen	29 Variational Inequalities for Monotone Operators in Nonreflexive Banach Spaces
C. N. Madu	35 A Fuzzy Theoretic Approach to Simulation Metamodeling
D. D. Reuster, G. A. Thiele and P. W. Eloe	43 The Convergence of Iterative Solutions to the Electric Field Integral Equation
K. K. Nambiar	51 Ackermann Functions and Transfinite Ordinals
F. Poupaud and C. Ringhofer	55 Quantum Hydrodynamic Models in Semiconductor Crystals
J. M. Rakotoson	61 Strong Continuity of the Relative Rearrangement Maps and Application to a Galerkin Approach for Nonlocal Problems
I. Gohberg and I. Koltracht	65 A Fast Realization of Preconditioned Conjugate Gradients for Wiener-Hopf Integral Equations
G. A. Latham	73 Rank 2 Commuting Ordinary Differential Operators and Darboux Conjugates of KdV
E. Tarafdar and X.-Z. Yuan	79 Set-Valued Topological Contractions
T. Prvan	83 Integrating Noisy Data
M. S. Jacobson, M. J. Lipman and F. R. McMorris	89 Trees That Are Sphere-of-Influence Graphs
T. T. Lu and S. S. Cheng	95 A Necessary Condition for the Minimum of a Quadratic Form under Rearrangements

